

Please amend claim 1 as follows:

1. (once amended) An affinity-controlling material, [wherein] comprising a stimulus-responsive polymer and an affinitive substance (ligand) having affinity for a target substance [are ]independently attached[, preferably covalently,] to a support matrix.

Please amend claim 2 as follows:

2. (once amended) The affinity-controlling material [as claimed in] of claim 1, wherein the affinity between the affinitive substance and the target substance is [possible to change reversibly] reversibly changed by subjecting a mixture of the affinity-controlling material and the target substance<sub>1</sub> in solution<sub>1</sub> to a physical stimulus thereby changing the chemical or physical environment around the affinitive substance provided by the polymer.

Please amend claim 3 as follows:

3. (once amended) The affinity-controlling material [as claimed in claim 1 or 2] of claim 2, wherein the affinity [of] between the affinitive substance [of] and the target substance is reversibly changed by [a] the physical stimulus while keeping at least one of conditions other than temperature constant.

Please amend claim 4 as follows:

4. (once amended) The affinity-controlling material [as claimed in claim 1, 2, or 3] of claim 2, wherein said physical stimulus is a temperature change.

Please amend claim 5 as follows:

5. (once amended) The affinity-controlling material [as claimed in any of claims 1, 2, 3, or 4] of claim 1, wherein the affinitive substance of a target substance does not interact with the stimulus-responsive polymer.

Please amend claim 6 as follows:

6. (once amended) The affinity-controlling material [as claimed in any of claims 1 to 5] of claim 1, wherein the [bonding ability of] affinity of the affinitive substance for the target substance is [controlled depending] dependent on the length of a spacer by which the affinitive substance of the target substance is bonded to the support[ or the size of the stimulus-responsive polymer].

Please amend claim 7 as follows:

7. (once amended) The affinity-controlling material [as claimed in any of claims 1 to 6] of claim 1, wherein the support comprises hydrophilic porous polymer particles

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having a uniform particle size produced by [the]a membrane emulsification  
[method]polymerization of monomers having epoxy groups on side chains and a  
chemical treatment with an acidic substance or a basic substance[ starting with a  
monomer having epoxy groups in the side chain].

[Please amend claim 9 as follows:]

9. (once amended) [A]In a method of separating and purifying a target substance by  
affinity, the improvement comprising using[ with the use of] the affinity-  
controlling material [as claimed in any of claims 1 to 7]of claim 1.

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Please add new claim 10 as follows:

10. (new) A chromatographic packaging material comprising the affinity-controlling  
material of claim 1.

[Please add new claim 11 as follows:]

11. (new) The affinity-controlling material of claim 1, wherein the affinity of the  
affinity of the affinitive substance for the target substance is dependent on the size  
of the stimulus-responsive polymer.